

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

DEC 2 1 2017

REPLY TO THE ATTENTION OF MAILCODE :  $WU\mbox{-}16J$ 

### <u>CERTIFIED MAIL</u> 7017 0660 0000 3661 8175 <u>RETURN RECEIPT REQUESTED</u>

Mr. Paul Husted Northeastern Exploration, Inc. 1190 Highway M-32 Johannesburg, Michigan 49751

Re: Permit Compliance Evaluation Inspection of Northeastern Exploration, Inc. Well Davis #1-19, Montmorency County, Michigan; U.S. Environmental Protection Agency Permit Number MI-119-1I-C002

Dear Mr. Husted:

On September 13, 2017, EPA representatives inspected the well listed above. The purpose was to evaluate compliance with the EPA permit referenced above as well as the Safe Drinking Water Act, and the requirements of the Underground Injection Control Program as codified in Title 40 of the Code of Federal Regulations Parts 144 and 146. Enclosed please find a copy of our inspection report.

If you have any questions, please feel free to contact Andrew Greenhagen of my staff at (312) 353-7648 or by email to greenhagen.andrew@epa.gov.

Sincerely,

Stephen M. Jann, Chief

Underground Injection Control Branch

Enclosure

SENDER: CON  Complete iten Print your nan Gron the from Gron the Gron th	U.S. Postal Service" CERTIFIED MAIL RECEIPT Domestic Mall Only  For delivery information visit our yelsaite at www.usps.coms.  Certified Mail Fee    Fixtro Services & Prees (check box, add fee ex approprile)     Getum Receipt (hardcopy)     Return Receipt (hardcopy)     Adult Signature Required     Adult Signature Required     Adult Signature Rearriched Delivery S.  Postage     Total Postage and Fees	IVERY  ☐ Agent ☐ Addressee  C. Date of Delivery ☐ ☐ Yes N: ☐ No
0500 040 🖽	Sent To Paul Husted Mediculter Explosion	riority Mail Express® egistered Mail™ egistered Mail Restricted elivery
were carrilled 1	City, Siago, EIF 44 A MI 49781	etum Receipt for erchandise gnature Confirmation™
	PS Form 3800, April 2015 PBN 7580-92-000-9047. See Reverse for instructions.	gnature Confirmation estricted Delivery
PS Form 3811, July 20	015 PSN 7530-02-000-9053	Actic Dotum Docum



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF: WU-16J

# UNDERGROUND INJECTION CONTROL INSPECTION REPORT

Purpose:

Permit Compliance Evaluation Inspection

Facility Operator:

Northeastern Exploration, Inc.

UIC Permit Number:

MI-119-1I-C002

Dates of Inspection:

September 13, 2017

EPA Representatives:

Andrew Greenhagen and Timothy Elkins

State Representative:

None

Facility Representatives:

Paul Husted and Colleen Allen

Report Prepared by:

Andrew Greenhagen

Inspector Signatures:

11/13/17

11/13/17

#### BACKGROUND

The purpose of this report is to document EPA's evaluation of Northeastern Exploration, Inc. for compliance with the EPA permitted conditions and the Underground Injection Control (UIC) provisions of the Safe Drinking Water Act (SDWA) at its Davis #1-19 injection well site in Montmorency County, Michigan. Underground injection for disposal and enhanced recovery via Class I wells is regulated by EPA in Michigan.

EPA's authority to enter and inspect the well site is expressed in the <u>Inspection and Entry</u> section of the EPA permit and at Sections 1445(b)(1) and (c) of the Safe Drinking Water Act (42 U.S.C. § 300 j-4(b)). Operating, monitoring, and reporting requirements are outlined in Attachment A of the permit.

#### SITE INSPECTION -

On September 13, 2017, EPA Inspectors Andrew Greenhagen and Timothy Elkins arrived at the Northeastern Exploration, Inc. site at 2:00pm EDT. EPA Inspectors met with facility representatives Paul Husted and Colleen Allen prior to inspecting the well site. Mr. Greenhagen and Mr. Elkins presented EPA Inspector Credentials, and Mr. Greenhagen served a notice of inspection (Attachment A). Mr. Greenhagen signed the notice of inspection as the Inspector and Mr. Husted signed the notice of inspection as the Facility Representative. Mr. Greenhagen requested and received permission to take photographs during the inspection. Appropriate safety attire was also confirmed.

Mr. Husted stated that all waste arrives at the site via truck, and each load has a manifest or a bill of lading. Mr. Husted stated that each driver checks in with him at the office and presents their paperwork prior to driving back to unload at the wellsite. There are six 400-barrel storage tanks that receive the trucked waste prior to injection, and an additional seven frack tanks of 500 barrels each that may be utilized for injectate storage if needed. One of the 400 barrel tanks was beginning to show slight leakage at its base. Three shallow monitoring wells are also located at the site.

Automatic alarm systems were present for high injection pressure and low annulus pressure. Mr. Husted stated that the high injection pressure alarm was set to trip at 550 psi and the low annulus pressure alarm was set to trip at 100 psi. There is a red light on the shed that would illuminate if an alarm is tripped, and the auto-dialer would contact both Mr. Husted and his backup operator.

The well was not injecting at the time of inspection. The electronic continuous monitoring system showed an injection pressure of -8.4 psi and an annulus pressure of 247.5 psi. A secondary mechanical gauge on the annulus showed 270 psi, and additional circular charts are kept as backup records of pressure measurements. Solar panels and batteries are present to operate the monitoring equipment in times of a power outage.

The site is gated and locked, and the well is only operated when Mr. Husted or his backup are present.

At the completion of the inspection, EPA inspectors stated that an inspection report including photographs will be mailed to the permittee.

A transfer of

### RECORDS REVIEW

EPA reviewed a sample of monitoring reports from the previous three years.

## ATTACHMENTS

- Notice of Inspection Inspection Photo Log A)

Attachment A – U.S. EPA Notice of Inspection





#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF: WU-16J

## NOTICE OF INSPECTION

Underground injection Control Program

Date: 9/13/2017	Time: AM/PM (EST)
Date. 3/10/2017	
Facility to be inspected:	
Well	· ID Number
Davis #1-19	MI-119-11-C002
9	
Company Name & Address:	Northeastern Exploration, Inc. 1190 M-32
	Johannesburg, Michigan 49751
* * * * * * * * * * * * * * * * * * * *	
samples to determine whether the po	g records, files, papers, processes, controls and facilities, and or obtaining rson subject to an applicable underground injection control program has the Safe Drinking Water (SDWA) and any applicable permit or rule.
*section 1445(b)(1) and (c) of the SDW	A (42 U.S.C § 300 j-4(b)) is quoted on the back of this notice.
Received by:	Inspector:
13/191	3-17 ANDE 3-13-17
(Femilia: Representative)	(Lianc)

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- (b)(1) Except as provided in paragraph (2), the Administrator, or representatives of the Administrator duly designated by him, upon presenting appropriate credentials and a written notice to any supplier of water or other person subject to
- (A) a national primary drinking water regulation prescribed under Section 1412,
- (B) an applicable underground injection control program, or

Text of section 1445(b) (1) and (c) of the Safe Drinking Water Act:

(C) any requirement to monitor an unregulated containment pursuant to subsection (a), or person in charge of any of the property of such supplier or other person referred to in clause (A), (B), or (C), is authorized to enter any establishment, facility, or other property of such supplier or other persons in order to determine whether such supplier or other person has acted or is acting in compliance with this title, including for this purpose, inspection at reasonable times, of records, files, papers, processes, controls, and facilities, or in order to test any feature of public water system, including its raw water source. The Administrator or the Comptroller General (or any representative designated, by either) shall have access for the purpose of audit and examination to any records, reports, or information of a grantee which are required to be maintained under subsection (a) or which are pertinent to any financial assistance under this title.

(c) Whoever fails or refuses to comply with any requirement of subsection (a) of this section or to allow the Administrator, the Comptroller General, or representatives of either, to enter and conduct any audit or inspection authorized by subsection (b) or this section shall be subject to a civil penalty or not to exceed \$25,000.

\*Amendments to EPA's Civil Penalty Policies to Implement the 2017 Civil Monetary Penalty Inflation Adjustment Rule (Effective January 15, 2017)

Violations of the Safe Drinking Water Act and Underground Injection Control regulations are subject to Administrative Orders which may include administrative penalties of up to \$273,945, civil judicial penalties of up to \$54,789 per day of violation, and criminal judicial penalties of up to three years' imprisonment and fines in accordance with Title 18 of the United States Code.

# Attachment B – U.S. EPA Photo Log – Northeastern Exploration Inspection Underground Injection Control Branch Garmin Monterra GPS Camera



Photo 1: Northeastern Exploration Davis #1-19 (MI-119-1I-C002) wellhead and chart recorders. 9/13/17, 3:16 PM; IMG\_20170913\_151648.jpg



**Photo 2:** Northeastern Exploration Davis #1-19 (MI-119-1I-C002) wellhead vault. 9/13/17, 3:17 PM; IMG\_20170913\_151717.jpg

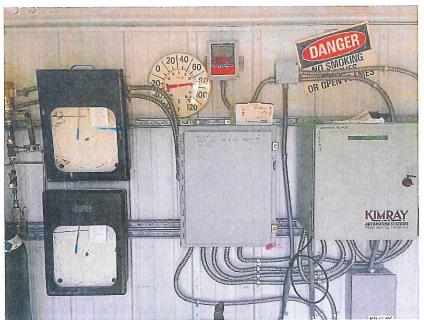


Photo 3: Northeastern Exploration Davis #1-19 (MI-119-1I-C002) chart recorders and Kimray system for continuous monitoring. 9/13/17, 3:17 PM; IMG\_20170913\_151727.jpg



**Photo 4:** Northeastern Exploration Davis #1-19 (MI-119-1I-C002) chart recorder. 9/13/17, 3:17 PM; IMG\_20170913\_151742.jpg



Photo 5: Northeastern Exploration Davis #1-19 (MI-119-1I-C002) wellhead. 9/13/17, 3:22 PM; IMG\_20170913\_152239.jpg



Photo 6: Northeastern Exploration Davis #1-19 (MI-119-1I-C002) injectate storage tanks. 9/13/17, 3:23 PM; IMG\_20170913\_152326.jpg



**Photo 7:** Northeastern Exploration Davis #1-19 (MI-119-1I-C002) injectate storage tanks and solar panels.

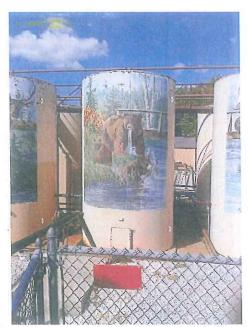
9/13/17, 3:23 PM; IMG\_20170913\_152348.jpg



**Photo 8:** Northeastern Exploration Davis #1-19 (MI-119-1I-C002) wellhead house with storage tanks and solar panels in the background. 9/13/17, 3:24 PM; IMG\_20170913\_152404.jpg



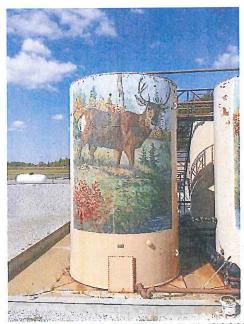
**Photo 9:** Northeastern Exploration Davis #1-19 (MI-119-1I-C002) wellhead house. 9/13/17, 3:24 PM; IMG\_20170913\_152424.jpg



**Photo 10:** Northeastern Exploration Davis #1-19 (MI-119-1I-C002) injectate storage tank. 9/13/17, 3:24 PM; IMG\_20170913\_152448.jpg



**Photo 11:** Northeastern Exploration Davis #1-19 (MI-119-1I-C002) injectate storage tank. 9/13/17, 3:25 PM; IMG\_20170913\_152500.jpg



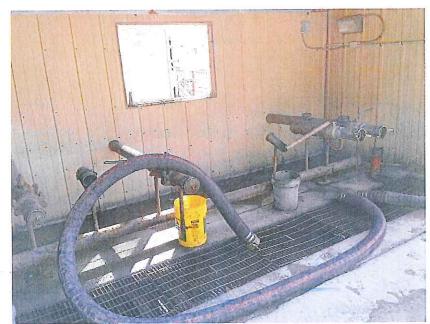
**Photo 12:** Northeastern Exploration Davis #1-19 (MI-119-1I-C002) injectate storage tank. 9/13/17, 3:25 PM; IMG\_20170913\_152520.jpg



**Photo 13:** Northeastern Exploration Davis #1-19 (MI-119-1I-C002) injectate storage tank showing signs of slight leakage at the bottom rusty area. 9/13/17, 3:25 PM; IMG\_20170913\_152525.jpg



**Photo 14:** Northeastern Exploration Davis #1-19 (MI-119-1I-C002) electrical panels. 9/13/17, 3:27 PM; IMG\_20170913\_152755.jpg



**Photo 15:** Northeastern Exploration Davis #1-19 (MI-119-1I-C002) offloading area for the waste arriving via trucks.

9/13/17, 3:28 PM; IMG\_20170913\_152815.jpg



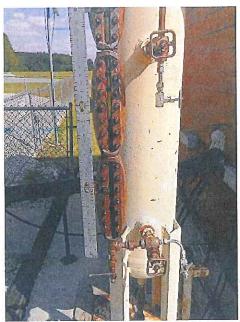
**Photo 16:** Northeastern Exploration Davis #1-19 (MI-119-1I-C002) frack tanks. 9/13/17, 3:28 PM; IMG\_20170913\_152833.jpg



Photo 17: Northeastern Exploration Davis #1-19 (MI-119-1I-C002) injectate storage tanks. 9/13/17, 3:30 PM; IMG\_20170913\_153019.jpg



Photo 18: Northeastern Exploration Davis #1-19 (MI-119-1I-C002) annulus tank. 9/13/17, 3:33 PM; IMG\_20170913\_153325.jpg



**Photo 19:** Northeastern Exploration Davis #1-19 (MI-119-1I-C002) annulus tank sight glass. 9/13/17, 3:33 PM; IMG\_20170913\_153341.jpg



**Photo 20:** Northeastern Exploration Davis #1-19 (MI-119-1I-C002) injectate storage tank. 9/13/17, 3:34 PM; IMG\_20170913\_153429.jpg



Photo 21: Northeastern Exploration Davis #1-19 (MI-119-1I-C002) injectate storage tank showing signs of slight leakage at the bottom rusty area. 9/13/17, 3:35 PM; IMG\_20170913\_153517.jpg

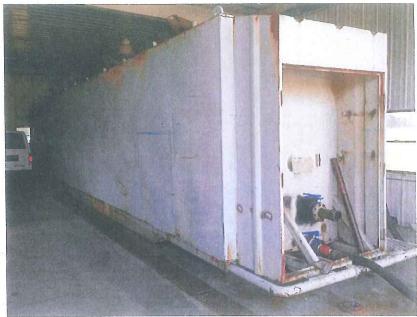


Photo 22: Northeastern Exploration Davis #1-19 (MI-119-1I-C002) fresh water storage tank located inside the facility building. 9/13/17, 3:40 PM; IMG\_20170913\_154043.jpg



**Photo 23:** Northeastern Exploration Davis #1-19 (MI-119-1I-C002) on-site fresh water well. 9/13/17, 3:44 PM; IMG\_20170913\_154452.jpg